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REMARKS

The application has been reviewed in light of the final Office Action dated May 9, 2007.

Claims 1-12 were pending. By this Amendment, claim 12 has been canceled, without prejudice

or disclaimer, claims 1, 5 and 8 have been amended to include the features formerly recited in

now-canceled claim 12, and claims 4, 7 and 11 have been amended by rewriting them in

independent form including all of the limitations of the base claim and any intervening claims.

Since no new matter and no new Issues have been introduced by the present Amendment, entry

of the Amendment is requested. Accordingly, claims 1-11 are pending upon entry of this

Amendment, with claims 1, 4, 5, 7, 8 and 11 being in independent form.

Claims 1-3, 5, 6, 8-10 and 12 were rejected under 35 U.S.C. § 102(e) as purportedly

anticipated by U.S. Patent No. 6,658,583 to Kudo et al.

Applicant has carefully considered the Examiner's comments and the cited art, and

respectfully submits that independent claims 1, 5 and 8 are patentable over the cited art, for at

least the following reasons.

This application relates to a PWM signal generating circuit generating for generating a

periodic PWM signal wherein the time period between (i) the time when the PWM signal is

changed into the active state and (ii) the time when the PWM signal is changed into the inactive

state, is increased or decreased at a predetermined rate in a predetermined period. Each of

independent claims 1, 5 and 8 addresses these features, as well as additional features.

Kudo, as understood by Applicant, proposes a PWM control circuit purportedly having a

reduced circuit scale.

Figs 1B and 1C of Kudo, which were cited in the Office Action, are reproduced below:

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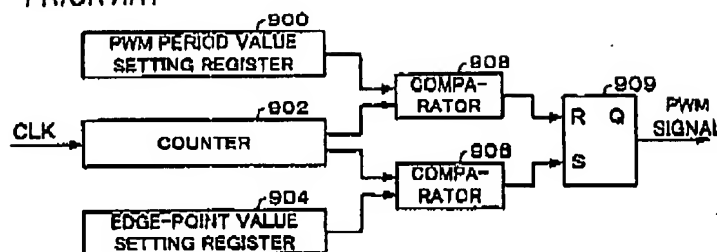Page 9

FIG. 1B
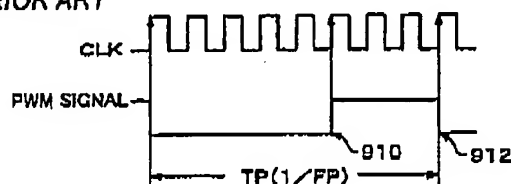### PRIOR ART

FIG. 1C
PRIOR ART

Fig. 1B of Kudo (as further described in Kudo, at column 1, lines 15-42), contrary to the contention in the Office Action regarding now-canceled claim 12, does not disclose or suggest a circuit wherein the time period between (i) the time when the PWM signal is changed into the active state and (ii) the time when the PWM signal is changed into the inactive state, is increased or decreased at a predetermined rate in a predetermined period.

Kudo, column 1, lines 15-42, states as follows:

> A conventional PWM control circuit as shown in FIG. 1B comprises a PWM period value setting register 900, a counter 902, an edge-point value setting register 904, comparators 906, 908 and an Rs flip-flop 909, for example.
> *The PWM period value setting register 900 is one that stores a period value for specifying the period TP of a PWM signal* Shown in FIG. 1C. The counter (increment counter) 902 increments a count value based on an operation clock CLK. *The edge-point register 904 stores an edge-point setting for specifying a first edge-point (or rising edge) 910 of FIG. 1C at which the level of the PWM signal may change from L-level to H-level, for example.*

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The comparator 906 compares the edge-point value from the edge-point value setting register 904 with the count value from the counter 902 If they are identical with each other, the comparator 906 generates a H-level signal to be outputted toward the terminal S (set terminal) of the RS flip-flop 909. Thus, the PWM signal will vary from L-level to H-level as shown by the first edge-point (or rising edge) 910 in FIG. 1C.

The comparator 908 compares the period value from the PWM period value setting register 900 with the count value from the counter 902. If they are identical with each other, the comparator 908 generates a H-level signal to be outputted toward the terminal R (reset terminal) of the RS flip-flop 909. Thus, the PWM signal will vary from R-level to L-level as shown by the second edge-point (or falling edge) 912 in FIG. 1C.

Thus, the PWM signal generated by the circuit shown in Fig. 1B has a fixed period and a fixed point at which the signal changes from low-level to high-level.

The cited art simply does not teach or suggest, however, a PWM signal generating circuit generating for generating a periodic PWM signal wherein the time period between (i) the time when the PWM signal is changed into the active state and (ii) the time when the PWM signal is changed into the inactive state, is increased or decreased at a predetermined rate in a predetermined period, as provided by the subject matter of claim 1 of the present application.

Independent claims 5 and 8 are patentably distinct from the cited art for at least similar reasons.

Accordingly, for at least the above-stated reasons, Applicant respectfully submits that independent claims 1, 5 and 8, and the claims depending therefrom, are patentable over the cited art.

The Office Action indicates that claims 4, 7 and 11 are objected to as being dependent upon a rejected base claim but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. By this Amendment, claims 4, 7

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and 11 have been amended by rewriting them in independent form including all of the limitations of the base claim and any intervening claims.

In view of the amendments to the claims and remarks hereinabove, Applicant submits that the application is now in condition for allowance. Accordingly, Applicant earnestly solicits the allowance of the application.

If a petition for an extension of time is required to make this response timely, this paper should be considered to be such a petition. The Patent Office is hereby authorized to charge any fees that are required in connection with this amendment and to credit any overpayment to our Deposit Account No. 03-3125.

If a telephone interview could advance the prosecution of this application, the Examiner is respectfully requested to call the undersigned attorney.

Respectfully submitted,

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